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Electronic Supplementary Information

Table S1 Contents of EPS extracted from *E. coli* cultivated with different *n*-BuOH for 12 h.

n-BuOH	PN	PS	PN/PS
0	1.34 ± 0.25	1.15 ± 0.15	1.11 ± 0.40
0.25%	3.01 ± 0.51	2.58 ± 0.22	1.17 ± 0.12
0.50%	5.00 ± 0.69	2.53 ± 0.18	1.98 ± 0.13
0.75%	2.44 ± 0.45	1.52 ± 0.72	1.88 ± 1.18

Wavenumber	Functional Groups	
~1625 cm ⁻¹	C=O stretching of amides associated with proteins (Amide I band).	
$\sim 1476 \text{ cm}^{-1}$	Asymmetric deformation of CH ₃ and CH ₂ of proteins.	
~1395 cm ⁻¹	Symmetric deformation of CH ₃ and CH ₂ of proteins and symmetric stretching of C=O of COO ⁻ groups.	
~1224 cm ⁻¹	Asymmetric stretching P=O of phosphodiester backbone of nucleic acid or phosphorylated proteins.	
~1200-900 cm ⁻¹	C–O–C of polysaccharides.	



Fig. S1 Zeta potentials of *E. coli* cells before and after challenged by *n*-BuOH. Overnight culture of *E. coli* was inoculated and cultivated for 12 h, followed by the EDTA method to extract EPS. The cells with and without EPS were challenged by 0.50% *n*-BuOH, and the Zeta potentials were measured by a Zetasizer. The results were identified by the Student's t-test.



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Fig. S2 The in situ synchronous fluorescence spectra of BSA. Different amounts of n-BuOH were added into BSA (10⁻⁵ mol/L) buffered by PBS (pH 7.4) to the final concentration of 0.50, 0.10, 0.20 and 0.30%. The synchronous fluorescence spectra were then measure by the fluorescence spectroscopy with a constant difference, while $\Delta \lambda = 15$ nm for Tyr residues (a) and $\Delta \lambda = 60$ nm for Trp residues (b).